

$U_6(2).2 \pmod{5}$

	blocks	defect	matrix
$G :$	1	1	5×4
	2	1	5×4
	3	1	5×4
	4	1	5×4
	5	1	5×4
	6	1	5×4
	7	0	$385_1 = \chi_{5,0}, \varphi_{5,0}$
	8	0	$385_2 = \chi_{5,1}, \varphi_{5,1}$
	9	0	$440_1 = \chi_{6,0}, \varphi_{6,0}$
	10	0	$440_2 = \chi_{6,1}, \varphi_{6,1}$
	11	0	$560_1 = \chi_{7,0}, \varphi_{7,0}$
	12 = $\overline{11}$	0	$560_2 = \chi_{7,1}, \varphi_{7,1}$
	13	0	$1540_1 = \chi_{9+}, \varphi_{9+}$
	14	0	$1155_1 = \chi_{11,0}, \varphi_{11,0}$
	15	0	$1155_2 = \chi_{11,1}, \varphi_{11,1}$
	16	0	$2310_1 = \chi_{12+}, \varphi_{12+}$
	17	0	$1540_2 = \chi_{15,0}, \varphi_{15,0}$
	18	0	$1540_3 = \chi_{15,1}, \varphi_{15,1}$
	19	0	$6160_1 = \chi_{16+}, \varphi_{16+}$
	20	0	$3520_1 = \chi_{18,0}, \varphi_{18,0}$
	21	0	$3520_2 = \chi_{18,1}, \varphi_{18,1}$
	22	0	$4620_1 = \chi_{19,0}, \varphi_{19,0}$
	23	0	$4620_2 = \chi_{19,1}, \varphi_{19,1}$
	24	0	$12320_1 = \chi_{22+}, \varphi_{22+}$
	25	0	$6930_1 = \chi_{24,0}, \varphi_{24,0}$
	26	0	$6930_2 = \chi_{24,1}, \varphi_{24,1}$
	27	0	$9240_1 = \chi_{26,0}, \varphi_{26,0}$
	28	0	$9240_2 = \chi_{26,1}, \varphi_{26,1}$
	29	0	$18480_1 = \chi_{27+}, \varphi_{27+}$
	30	0	$20790_1 = \chi_{29+}, \varphi_{29+}$
	31	0	$10395_1 = \chi_{31,0}, \varphi_{31,0}$
	32	0	$10395_2 = \chi_{31,1}, \varphi_{31,1}$
	33	0	$20790_2 = \chi_{32+}, \varphi_{32+}$
	34	0	$13860_1 = \chi_{35,0}, \varphi_{36,0}$
	35	0	$13860_2 = \chi_{35,1}, \varphi_{36,1}$
	36	0	$41580_1 = \chi_{39+}, \varphi_{37+}$
	37	0	$24640_1 = \chi_{41,0}, \varphi_{39,0}$
	38	0	$24640_2 = \chi_{41,1}, \varphi_{39,1}$
	39	0	$51030_1 = \chi_{42+}, \varphi_{40+}$
	40	0	$40095_1 = \chi_{46,0}, \varphi_{43,0}$

	blocks	defect	matrix
	41	0	$40095_2 = \chi_{46,1}, \varphi_{43,1}$
$2.G :$	42	1	5×4
	43	1	5×4
	44	1	5×4
	45	1	5×4
	46	1	5×4
	47	1	5×4
	48	0	$3080_1 = \chi_{53,0}, \varphi_{50,0}$
	49	0	$3080_2 = \chi_{53,1}, \varphi_{50,1}$
	50	0	$6720_1 = \chi_{54+}, \varphi_{51+}$
	51	0	$6160_2 = \chi_{57,0}, \varphi_{54,0}$
	52	0	$6160_3 = \chi_{57,1}, \varphi_{54,1}$
	53	0	$12320_2 = \chi_{58+}, \varphi_{55+}$
	54	0	$12320_3 = \chi_{63,0}, \varphi_{60,0}$
	55	0	$12320_4 = \chi_{63,1}, \varphi_{60,1}$
	56	0	$24640_3 = \chi_{64+}, \varphi_{61+}$
	57	0	$15840_1 = \chi_{67,0}, \varphi_{64,0}$
	58	0	$15840_2 = \chi_{67,1}, \varphi_{64,1}$
	59	0	$18480_2 = \chi_{68,0}, \varphi_{65,0}$
	60	0	$18480_3 = \chi_{68,1}, \varphi_{65,1}$
	61	0	$24640_4 = \chi_{71,0}, \varphi_{66,0}$
	62	0	$24640_5 = \chi_{71,1}, \varphi_{66,1}$
	63	0	$49280_1 = \chi_{72+}, \varphi_{67+}$
	64	0	$27720_1 = \chi_{74,0}, \varphi_{69,0}$
	65	0	$27720_2 = \chi_{74,1}, \varphi_{69,1}$
	66	0	$30240_1 = \chi_{75,0}, \varphi_{70,0}$
	67	0	$30240_2 = \chi_{75,1}, \varphi_{70,1}$
$3.G :$	68	1	5×4
	69	0	$420_1 = \chi_{79+}, \varphi_{73+}$
	70	1	5×4
	71	1	5×4
	72	0	$2310_2 = \chi_{83+}, \varphi_{77+}$
	73	0	$2970_1 = \chi_{85+}, \varphi_{79+}$
	74	0	$2970_2 = \chi_{86+}, \varphi_{80+}$
	$75 = \overline{74}$	0	$2970_3 = \chi_{87+}, \varphi_{81+}$
	76	0	$4620_3 = \chi_{88+}, \varphi_{82+}$
	77	0	$4620_4 = \chi_{89+}, \varphi_{83+}$
	78	0	$5040_1 = \chi_{90+}, \varphi_{84+}$
	79	0	$6930_3 = \chi_{92+}, \varphi_{86+}$
	80	0	$6930_4 = \chi_{93+}, \varphi_{87+}$

	blocks	defect	matrix
	81	0	$6930_5 = \chi_{94+}, \varphi_{88+}$
	$82 = \overline{81}$	0	$6930_6 = \chi_{95+}, \varphi_{89+}$
	83	0	$9240_3 = \chi_{97+}, \varphi_{91+}$
	84	0	$9240_4 = \chi_{98+}, \varphi_{92+}$
	85	0	$13440_1 = \chi_{100+}, \varphi_{94+}$
	86	0	$13860_3 = \chi_{101+}, \varphi_{95+}$
	87	0	$18480_4 = \chi_{102+}, \varphi_{96+}$
	88	0	$18480_5 = \chi_{103+}, \varphi_{97+}$
	89	0	$20790_3 = \chi_{104+}, \varphi_{98+}$
	90	0	$23760_1 = \chi_{106+}, \varphi_{100+}$
	91	0	$23760_2 = \chi_{107+}, \varphi_{101+}$
	$92 = \overline{91}$	0	$23760_3 = \chi_{108+}, \varphi_{102+}$
	93	0	$36960_1 = \chi_{110+}, \varphi_{105+}$
	94	0	$41580_2 = \chi_{113+}, \varphi_{106+}$
	95	0	$51030_2 = \chi_{115+}, \varphi_{107+}$
	96	0	$51030_3 = \chi_{116+}, \varphi_{108+}$
	97	0	$55440_1 = \chi_{117+}, \varphi_{110+}$
	98	0	$80190_1 = \chi_{120+}, \varphi_{111+}$
6.G :	99	0	$240_1 = \chi_{121+}, \varphi_{112+}$
	100	1	5×4
	101	1	5×4
	102	0	$5280_1 = \chi_{125+}, \varphi_{116+}$
	103	1	5×4
	104	0	$18480_6 = \chi_{132+}, \varphi_{124+}$
	105	0	$18480_7 = \chi_{133+}, \varphi_{125+}$
	106	0	$30240_3 = \chi_{136+}, \varphi_{126+}$
	107	0	$30240_4 = \chi_{137+}, \varphi_{127+}$
	108	0	$36960_2 = \chi_{138+}, \varphi_{130+}$
	109	0	$36960_3 = \chi_{139+}, \varphi_{131+}$
	110	0	$42240_1 = \chi_{140+}, \varphi_{132+}$
	111	0	$55440_2 = \chi_{145+}, \varphi_{133+}$
	112	0	$73920_1 = \chi_{146+}, \varphi_{134+}$
	113	0	$73920_2 = \chi_{147+}, \varphi_{135+}$
	114	0	$73920_3 = \chi_{148+}, \varphi_{136+}$

Block 1:	$\varphi_{1,0}$	$\varphi_{8,0}$	$\varphi_{25,0}$	$\varphi_{34,0}$
$1_1 = \chi_{1,0}$	1	.	.	.
$616_2 = \chi_{8,1}$	.	1	.	.
$8064_2 = \chi_{25,1}$	.	1	1	.
$11264_1 = \chi_{34,0}$	1	.	.	1
$18711_4 = \chi_{38,1}$	.	.	1	1

$$\begin{aligned}
\varphi_{1,0} &= 1_1 \\
\varphi_{8,0} &= 616_1 \\
\varphi_{25,0} &= 7448_1 \\
\varphi_{34,0} &= 11263_1
\end{aligned}$$

Block 2:	$\varphi_{1,1}$	$\varphi_{8,1}$	$\varphi_{25,1}$	$\varphi_{34,1}$
$1_2 = \chi_{1,1}$	1	.	.	.
$616_1 = \chi_{8,0}$	.	1	.	.
$8064_1 = \chi_{25,0}$	.	1	1	.
$11264_2 = \chi_{34,1}$	1	.	.	1
$18711_3 = \chi_{38,0}$	.	.	1	1

$$\begin{aligned}
\varphi_{1,1} &= 1_2 \\
\varphi_{8,1} &= 616_2 \\
\varphi_{25,1} &= 7448_2 \\
\varphi_{34,1} &= 11263_2
\end{aligned}$$

Block 3:	$\varphi_{2,0}$	$\varphi_{4,0}$	$\varphi_{20,0}$	$\varphi_{42,0}$
$22_1 = \chi_{2,0}$	1	.	.	.
$252_2 = \chi_{4,1}$	.	1	.	.
$4928_2 = \chi_{20,1}$	.	1	1	.
$32768_1 = \chi_{44,0}$	1	.	.	1
$37422_1 = \chi_{45,0}$	.	.	1	1

$$\begin{aligned}
\varphi_{2,0} &= 22_1 \\
\varphi_{4,0} &= 252_1 \\
\varphi_{20,0} &= 4676_1 \\
\varphi_{42,0} &= 32746_1
\end{aligned}$$

Block 4:	$\varphi_{2,1}$	$\varphi_{4,1}$	$\varphi_{20,1}$	$\varphi_{42,1}$
$22_2 = \chi_{2,1}$	1	.	.	.
$252_1 = \chi_{4,0}$	.	1	.	.
$4928_1 = \chi_{20,0}$	.	1	1	.
$32768_2 = \chi_{44,1}$	1	.	.	1
$37422_2 = \chi_{45,1}$	.	.	1	1

$$\begin{aligned}
\varphi_{2,1} &= 22_2 \\
\varphi_{4,1} &= 252_2 \\
\varphi_{20,1} &= 4676_2 \\
\varphi_{42,1} &= 32746_2
\end{aligned}$$

Block 5:	$\varphi_{3,0}$	$\varphi_{14,0}$	$\varphi_{21,0}$	$\varphi_{35,0}$
$231_1 = \chi_{3,0}$	1	.	.	.
$1386_2 = \chi_{14,1}$	.	1	.	.
$5544_1 = \chi_{21,0}$	1	.	1	.
$14784_2 = \chi_{36,1}$	.	1	.	1
$18711_2 = \chi_{37,1}$	.	.	1	1

$$\begin{aligned}
\varphi_{3,0} &= 231_1 \\
\varphi_{14,0} &= 1386_1 \\
\varphi_{21,0} &= 5313_1 \\
\varphi_{35,0} &= 13398_1
\end{aligned}$$

Block 6:	$\varphi_{3,1}$	$\varphi_{14,1}$	$\varphi_{21,1}$	$\varphi_{35,1}$
$231_2 = \chi_{3,1}$	1	.	.	.
$1386_1 = \chi_{14,0}$	.	1	.	.
$5544_2 = \chi_{21,1}$	1	.	1	.
$14784_1 = \chi_{36,0}$	.	1	.	1
$18711_1 = \chi_{37,0}$	.	.	1	1

$$\begin{aligned}
\varphi_{3,1} &= 231_2 \\
\varphi_{14,1} &= 1386_2 \\
\varphi_{21,1} &= 5313_2 \\
\varphi_{35,1} &= 13398_2
\end{aligned}$$

Block 42:	$\varphi_{44,0}$	$\varphi_{45,0}$	$\varphi_{49,0}$	$\varphi_{53,0}$
$56_1 = \chi_{47,0}$	1	.	.	.
$176_2 = \chi_{48,1}$	.	1	.	.
$2464_1 = \chi_{52,0}$	1	.	1	.
$5544_4 = \chi_{56,1}$	.	1	.	1
$7776_2 = \chi_{60,1}$	.	.	1	1

$$\begin{aligned}
\varphi_{44,0} &= 56_1 \\
\varphi_{45,0} &= 176_1 \\
\varphi_{49,0} &= 2408_1 \\
\varphi_{53,0} &= 5368_1
\end{aligned}$$

Block 43:	$\varphi_{44,1}$	$\varphi_{45,1}$	$\varphi_{49,1}$	$\varphi_{53,1}$
$56_2 = \chi_{47,1}$	1	.	.	.
$176_1 = \chi_{48,0}$	.	1	.	.
$2464_2 = \chi_{52,1}$	1	.	1	.
$5544_3 = \chi_{56,0}$	.	1	.	1
$7776_1 = \chi_{60,0}$	.	.	1	1

$$\begin{aligned}
\varphi_{44,1} &= 56_2 \\
\varphi_{45,1} &= 176_2 \\
\varphi_{49,1} &= 2408_2 \\
\varphi_{53,1} &= 5368_2
\end{aligned}$$

Block 44:	$\varphi_{46,0}$	$\varphi_{57,0}$	$\varphi_{58,0}$	$\varphi_{59,0}$
$616_3 = \chi_{49,0}$	1	.	.	.
$9856_2 = \chi_{61,1}$	.	1	.	.
$11264_4 = \chi_{62,1}$	1	.	1	.
$21384_2 = \chi_{69,1}$	.	1	.	1
$22176_2 = \chi_{70,1}$	.	.	1	1

$$\begin{aligned}
\varphi_{46,0} &= 616_3 \\
\varphi_{57,0} &= 9856_1 \\
\varphi_{58,0} &= 10648_1 \\
\varphi_{59,0} &= 11528_1
\end{aligned}$$

Block 45:	$\varphi_{46,1}$	$\varphi_{57,1}$	$\varphi_{58,1}$	$\varphi_{59,1}$
$616_4 = \chi_{49,1}$	1	.	.	.
$9856_1 = \chi_{61,0}$	.	1	.	.
$11264_3 = \chi_{62,0}$	1	.	1	.
$21384_1 = \chi_{69,0}$	.	1	.	1
$22176_1 = \chi_{70,0}$	.	.	1	1

$$\begin{aligned}
\varphi_{46,1} &= 616_4 \\
\varphi_{57,1} &= 9856_2 \\
\varphi_{58,1} &= 10648_2 \\
\varphi_{59,1} &= 11528_2
\end{aligned}$$

Block 46:	$\varphi_{47,0}$	$\varphi_{48,0}$	$\varphi_{63,0}$	$\varphi_{71,0}$
$792_1 = \chi_{50,0}$	1	.	.	.
$1232_2 = \chi_{51,1}$	.	1	.	.
$13608_2 = \chi_{66,1}$	.	1	1	.
$32768_3 = \chi_{76,0}$	1	.	.	1
$44352_1 = \chi_{77,0}$	.	.	1	1

$$\begin{aligned}
\varphi_{47,0} &= 792_1 \\
\varphi_{48,0} &= 1232_1 \\
\varphi_{63,0} &= 12376_1 \\
\varphi_{71,0} &= 31976_1
\end{aligned}$$

Block 47:	$\varphi_{47,1}$	$\varphi_{48,1}$	$\varphi_{63,1}$	$\varphi_{71,1}$
$792_2 = \chi_{50,1}$	1	.	.	.
$1232_1 = \chi_{51,0}$	.	1	.	.
$13608_1 = \chi_{66,0}$	.	1	1	.
$32768_4 = \chi_{76,1}$	1	.	.	1
$44352_2 = \chi_{77,1}$	.	.	1	1

$$\begin{aligned}
\varphi_{47,1} &= 792_2 \\
\varphi_{48,1} &= 1232_2 \\
\varphi_{63,1} &= 12376_2 \\
\varphi_{71,1} &= 31976_2
\end{aligned}$$

Block 68:	φ_{72+}	φ_{76+}	φ_{90+}	φ_{104+}
$42_1 = \chi_{78+}$	1	.	.	.
$1848_1 = \chi_{82+}$	1	1	.	.
$7392_1 = \chi_{96+}$	.	.	1	.
$37422_3 = \chi_{111+}$	.	1	.	1
$43008_1 = \chi_{114+}$	.	.	1	1

$$\begin{aligned}
\varphi_{72+} &= 42_1 \\
\varphi_{76+} &= 1806_1 \\
\varphi_{90+} &= 7392_1 \\
\varphi_{104+} &= 35616_1
\end{aligned}$$

Block 70:	φ_{74+}	φ_{78+}	φ_{93+}	φ_{103+}
$462_1 = \chi_{80+}$	1	.	.	.
$2772_1 = \chi_{84+}$	.	1	.	.
$11088_1 = \chi_{99+}$	1	.	1	.
$29568_1 = \chi_{109+}$	.	1	.	1
$37422_4 = \chi_{112+}$	.	.	1	1

$$\begin{aligned}
\varphi_{74+} &= 462_1 \\
\varphi_{78+} &= 2772_1 \\
\varphi_{93+} &= 10626_1 \\
\varphi_{103+} &= 26796_1
\end{aligned}$$

Block 71:	φ_{75+}	φ_{85+}	φ_{99+}	φ_{109+}
$924_1 = \chi_{81+}$	1	.	.	.
$5544_5 = \chi_{91+}$	.	1	.	.
$22176_3 = \chi_{105+}$	1	.	1	.
$59136_1 = \chi_{118+}$	.	1	.	1
$74844_1 = \chi_{119+}$	.	.	1	1

$$\begin{aligned}
\varphi_{75+} &= 924_1 \\
\varphi_{85+} &= 5544_1 \\
\varphi_{99+} &= 21252_1 \\
\varphi_{109+} &= 53592_1
\end{aligned}$$

Block 100:	φ_{113+}	φ_{115+}	φ_{119+}	φ_{122+}	
$1344_1 = \chi_{122+}$	1	.	.	.	$\varphi_{113+} = 1344_1$
$3696_1 = \chi_{124+}$	1	1	.	.	$\varphi_{115+} = 2352_1$
$14784_3 = \chi_{129+}$	.	1	1	.	$\varphi_{119+} = 12432_1$
$14784_4 = \chi_{130+}$	.	.	.	1	$\varphi_{122+} = 14784_1$
$27216_1 = \chi_{134+}$	.	.	1	1	

Block 101:	φ_{114+}	φ_{117+}	φ_{118+}	φ_{129+}	
$2112_1 = \chi_{123+}$	1	.	.	.	$\varphi_{114+} = 2112_1$
$7392_2 = \chi_{126+}$	.	1	.	.	$\varphi_{117+} = 7392_2$
$11088_2 = \chi_{127+}$	1	.	1	.	$\varphi_{118+} = 8976_1$
$42768_1 = \chi_{141+}$	.	1	.	1	$\varphi_{129+} = 35376_1$
$44352_4 = \chi_{144+}$	.	.	1	1	

Block 103:	φ_{120+}	φ_{121+}	φ_{123+}	φ_{128+}	
$12672_1 = \chi_{128+}$	1	.	.	.	$\varphi_{120+} = 12672_1$
$15552_1 = \chi_{131+}$	.	.	1	.	$\varphi_{121+} = 14016_1$
$29568_2 = \chi_{135+}$	.	1	1	.	$\varphi_{123+} = 15552_1$
$43008_2 = \chi_{142+}$	1	.	.	1	$\varphi_{128+} = 30336_1$
$44352_3 = \chi_{143+}$	.	1	.	1	